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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,078	06/07/2006	Stephan Lausterer	15540-064US1	1571
26161 7590 11/26/2007 FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER ZHR, ASHRAF A	
			ART UNIT 2179	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">10/550,078</p>	<p>Applicant(s)</p> <p align="center">LAUSTERER ET AL.</p>	
	<p>Examiner</p> <p align="center">Ashraf Zahr</p>	<p>Art Unit</p> <p align="center">2179</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/7/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The application was filed on 9/19/2005. Claims 1-21 are pending in the case.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4-6, 8, 11-15, 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Rutkowski, US 6,389,325 (Hereinafter, Rutkowski).

Regarding Claim 1, Rutkowski discloses, “a user interface of a machine tool, the user interface comprising: a display that is divided into at least a first display region and a second display region” (Rutkowski, col 3, ln 40-45).

Rutkowski also discloses, “wherein the first display region permanently displays a main menu that provides selection of different main modes of the user interface”.

Specifically, Rutkowski discloses for each possible mode of operation of a processing unit, a graphical symbol is available that is understandable to the user (Rutkowski, col 3, ln 60-65).

Rutkowski also discloses, “wherein each main mode is associated with a main window that is opened in the second display region when a main mode is selected in

the main menu". Specifically, Rutkowski discloses windows for the various processing units of the respective machine tools (Rutkowski, col 3, ln 38-40).

Rutkowski also discloses, "wherein at least one of the main windows comprises a permanently displayed submenu that provides selection of different submodes with each submode being associated with and a subwindow that is opened when an associated submode is selected". Specifically, Rutkowski discloses a selection menu in the title line (Rutkowski, col 3, ln 15-17).

Rutkowski also discloses, "wherein one or more of the main windows and the subwindows include input fields" (Rutkowski, col 4, ln 64 –col 5, ln 4).

Rutkowski also discloses, "an input unit for selecting the individual modes and for processing the input fields provided in a window, wherein the display permanently displays which one of the main modes is selected" (Rutkowski, col 2, ln 55-65).

Regarding Claim 2, Rutkowski also discloses, "the user interface of claim 1, wherein the selected main mode is marked in the main menu". Specifically, Rutkowski discloses a title line (Rutkowski, col 3, ln 10).

Regarding Claim 4, Rutkowski also discloses, "the user interface of claim 3, wherein at least one of the main windows, the subwindows, or the sub-subwindows comprises: a navigation menu for selecting different navigation modes that each graphically represent a region of the machine tool". Specifically, the softkeys are provided for context related input capability (Rutkowski, col 3, ln 10-15).

Rutkowski also discloses, "a navigation window associated with each navigation mode such that a navigation window is opened within at least one main window, subwindow, or sub-subwindow when its associated navigation mode is selected". Specifically, the softkeys are related to a definite display window (Rutkowski, col 3, In 10-15).

Regarding Claim 5, Rutkowski also discloses, "the user interface of claim 3, wherein if in an original main mode, a particular the subwindow, sub-subwindow, or navigation window was opened and a user switched from the original main mode to another main mode, if the user switches back to the original main mode from the other main mode, the particular subwindow, sub-subwindow, or navigation window is opened upon return into the original main mode". Specifically, the softkeys are provided for context related input capability (Rutkowski, col 3, In 10-15).

Regarding Claim 6, Rutkowski also discloses, "the user interface of claim 3, wherein at least one of the main windows, the subwindows, or the sub-subwindows comprises at least one activity button for processing input fields provided therein, in which each activity button is associated with an activity button window". Specifically, the softkeys are provided for context related input capability (Rutkowski, col 3, In 10-15).

Regarding Claim 8, Rutkowski also discloses, "the user interface of claim 4, wherein a sequence of the individual submodes, sub-submodes, and navigation modes

within one main mode is oriented on the workflow of the machine tool". Specifically, the processing units can execute various functions simultaneously (Rutkowski, col 3, ln 35-55).

Regarding Claim 11, Rutkowski also discloses, "the user interface of claim 1 wherein at least one of the main windows or the subwindows comprises: a navigation menu for selecting different navigation modes that each graphically represent a region of the machine tool". Specifically, the softkeys are provided for context related input capability (Rutkowski, col 3, ln 10-15).

Rutkowski also discloses, "a navigation window associated with each navigation mode such that a navigation window is opened within at least one main window or subwindow when its associated navigation mode is selected". Specifically, the softkeys are related to a definite display window (Rutkowski, col 3, ln 10-15).

Regarding Claim 12, Rutkowski also discloses, "the user interface of claim 11 wherein at least one of the main windows or the subwindows comprises at least one activity button for processing input fields provided therein, in which each activity button is associated with an activity button window". Specifically, the softkeys are provided for context related input capability (Rutkowski, col 3, ln 10-15).

Regarding Claim 13, Rutkowski also discloses, "the user interface of claim 1, wherein the main menu is displayed as a menu bar". Specifically, the Rutkowski displays a menu bar (Rutkowski, Fig 2: 11).

Regarding Claim 14, Rutkowski also discloses, “a method of interfacing with a user of a machine tool, the method comprising: displaying a first display region in a display” (Rutkowski, Fig 2: 11).

Rutkowski also discloses, “displaying a second display region in the display” (Rutkowski, col 3, Fig 2: 1).

Rutkowski also discloses, “permanently displaying a main menu in the first display region, wherein the main menu provides a selection of different main modes of the user interface, wherein each main mode is associated with a main window”. Specifically, Rutkowski discloses a MODE of operation (Rutkowski, col 3, ln 15-20, Fig 2: 11)

Rutkowski also discloses, “opening a main window in the second display region when it associated main mode is selected in the main menu”. Specifically, Rutkowski discloses opening a window for each mode of operation (Rutkowski, Fig 2: 20)

Rutkowski also discloses, “permanently displaying a submenu in at least one of the main menus, wherein the submenu provides a selection of different submodes that are each associated with a subwindow”. Specifically, Rutkowski discloses a selection menu in the title line with a mode of operation (Rutkowski, col 3, ln 15-17).

Rutkowski also discloses, “opening a subwindow when its associated submode is selected”. Specifically, Rutkowski opens a window that are each assigned to different processing nits or tasks of the respective machine tool (Rutkowski, col 2, ln 65 – col 3, ln 5).

Rutkowski also discloses, "displaying input fields in one or more of the main windows and the subwindows enabling selection of one or more of a main mode or a submode through an input unit" (Rutkowski, col 4, ln 64 –col 5, ln 4).

Rutkowski also discloses, "processing the input fields at the input unit; and permanently displaying in the display which one of the main modes is selected" (Rutkowski, col 2, ln 55-65).

Regarding Claim 15, Rutkowski also discloses, "the method of claim 14, further comprising marking the selected main mode in the main menu". Specifically, a title bar that can display the processing function in the title area (Rutkowski, col 3, ln 47-52).

Regarding Claim 17, Rutkowski also discloses, "the method of claim 16, further comprising: presenting a navigation menu having different navigation modes in at least one of the main windows, the subwindows, or the sub-subwindows, wherein each navigation mode represents a region of the machine tool". Specifically, the softkeys are provided for context related input capability (Rutkowski, col 3, ln 10-15).

Rutkowski also discloses, "associating a navigation window with each navigation mode" and "opening a navigation window within the at least one main window, subwindow, or sub- subwindow when its associated navigation mode is selected". Specifically, the softkeys are related to a definite display window (Rutkowski, col 3, ln 10-15).

Regarding Claim 18, Rutkowski also discloses, "the method of claim 16, further comprising: opening a particular subwindow, sub-subwindow, or navigation window in an original main mode". Specifically, Rutkowski discloses windows for the various processing units of the respective machine tools (Rutkowski, col 3, ln 38-40).

Rutkowski also discloses, "receiving a selection to switch from the original main mode to another main mode". Specifically, Rutkowski discloses the ability optionally activated the windows by the user during the simultaneous execution of various tasks (Rutkowski, col 4, ln 30-55).

Rutkowski also discloses, "receiving a selection to switch from the other main mode back to the original main mode". Specifically, Rutkowski discloses the ability optionally activated the windows by the user during the simultaneous execution of various tasks (Rutkowski, col 4, ln 30-55). The examiner reads this as being able to switch back and forth between windows.

Rutkowski also discloses, "opening the particular subwindow, sub-subwindow, or navigation window upon return to the original main mode". Specifically, the Rutkowski discloses the ability to cover or hide non-activated displays and then re-open them (Rutkowski, col 4, ln 30-55).

Regarding Claim 19, Rutkowski also discloses, "the method of claim 16, further comprising: presenting an activity button in at least one of the main windows, the subwindows, or the sub-subwindows, wherein an activity button supports processing of input fields provided in the at least one main window, subwindow, or sub-subwindow".

Specifically, the softkeys are provided for context related input capability (Rutkowski, col 3, ln 10-15).

Rutkowski also discloses, "associating each activity button with an activity button window". Specifically, these softkeys are always related to a definite display window (Rutkowski, col 3, ln 10-15).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3,7,16,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rutkowski, US 6,389,325 (Hereinafter, Rutkowski)

Regarding Claim 3, Rutkowski does not specifically disclose, "the user interface of claim 1, wherein at least one of the subwindows comprises a permanently displayed sub-submenu for selecting different submodes of a selected submode and a sub-subwindow associated with each sub-submode such that a sub-subwindow is opened when with its associated sub-submode is selected". However, Rutkowski discloses two display windows (Fig 2: 20, 30). There is also a main window (Fig 2: 10). There is no

sub-subwindow disclosed. However, it would be obvious to one of ordinary skill in the art at the time of the invention to use display a sub-subwindow when a user selects an operation state (Rutkowski, col 3, ln 55-60). The motivation to do so would be to create a new window to assign to a different processing unit or task (Rutkowski, col 3, ln 1-3).

Regarding Claim 7, Rutkowski does not specifically disclose, "the user interface of claim 6, wherein when an activity button window is opened, switching over to a different main window, subwindow, or sub-subwindow of the same main mode is blocked". However it would obvious to one of ordinary skill in the art at the time of the invention to block a switchover to a different menu. The motivation to do this is found in Rutkowski where it states that each processing unit or each processing channel of the machine tool there exists moreover a series of possible operating states or modes of operation (Rutkowski, col 18-25). These modes of operations allow invention to prevent or allow certain actions when the machine is a specific state.

Regarding Claim 16, Rutkowski also discloses, "the method of claim 1, further comprising: permanently displaying in at least one of the subwindows a sub-submenu that enables selection of different sub-submodes of a selected submode". Specifically, Rutkowski discloses a menu in the display window that can allow the user to select operation states (Rutkowski, col 3, ln 55-6).

Rutkowski does not specifically disclose, "associating with each sub-submode a sub-subwindow and opening a sub-subwindow when its associated sub-submode is

selected". However, Rutkowski discloses two display windows (Fig 2: 20, 30). There is also a main window (Fig 2: 10). There is no sub-subwindow disclosed. However, it would be obvious to one of ordinary skill in the art at the time of the invention to use display a sub-subwindow when a user selects an operation state (Rutkowski, col 3, ln 55-60). The motivation to do so would be to create a new window to assign to a different processing unit or task (Rutkowski, col 3, ln 1-3).

Regarding Claim 20, Rutkowski does not specifically disclose, "the method of claim 19, further comprising blocking switching to a different main window, subwindow, or sub-subwindow of a main mode when an activity button window is opened". However it would obvious to one of ordinary skill in the art at the time of the invention to block a switchover to a different menu. The motivation to do this is found in Rutkowski where it states that each processing unit or each processing channel of the machine tool there exists moreover a series of possible operating states or modes of operation (Rutkowski, col 18-25). These modes of operations allow invention to prevent or allow certain actions when the machine is a specific state.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rutkowski, US 6,389,325 (Hereinafter, Rutkowski) in view of Nishiyama et al., US Patent Number 6,236,399 (Hereinafter, Nishiyama).

Regarding Claim 10, Rutkowski does not specifically disclose, “the user interface of claim 1, wherein the display and the input unit are formed by a touch screen”. However, Nishiyama remedies this with a touch panel overlaid on a LCD (Nishiyama, col 4, ln 65 – col 5, ln 3). It would be obvious to one of ordinary skill in the art at the time of the invention to add the touch panel feature to Rutkowski’s user interface for a machine tool. The motivation to do so would be to provide an input for the selection of icons in the machine tool interface (Nishiyama, col 5, ln 26-40).

7. Claims 9, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rutkowski, US 6,389,325 (Hereinafter, Rutkowski) in view of Dando, US Patent Number 6,944,829 (Hereinafter, Dando).

Regarding Claim 9, Rutkowski does not specifically disclose, “the user interface of claim 3, characterized in that at least one of the submenus and the sub-submenus is designed as tab menu bar”. However, Dando remedies this with the disclosure of tabbed menus (Dando, col 9, ln 10-16). It would be obvious to one of ordinary skill in the art at the time of the invention to combine the references to add tabs to windows in Rutkowski. The motivation to do so would be give the window a tabbed layout (Dando, col 9, ln 16-17).

Regarding Claim 21, Rutkowski does not specifically disclose, “the method of claim 16, further comprising designing at least one of the submenus or sub-submenus

as a tab menu bar". However, Dando remedies this with the disclosure of tabbed menus (Dando, col 9, ln 10-16). It would be obvious to one of ordinary skill in the art at the time of the invention to combine the references to add tabs to windows in Rutkowski. The motivation to do so would be give the window a tabbed layout (Dando, col 9, ln 16-17).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Aritomi, US 6,407,760: Information Processing Apparatus Having Menu Display Function, and User Interface Control Method

McNally et al., US 6,384,850: Information Management and Synchronous Communications System with Menu Generation

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashraf Zahr whose telephone number is 571-270-1973. The examiner can normally be reached on M-F 9:30 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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AAZ
11/15/07

BA HUYH
PRIMARY EXAMINER